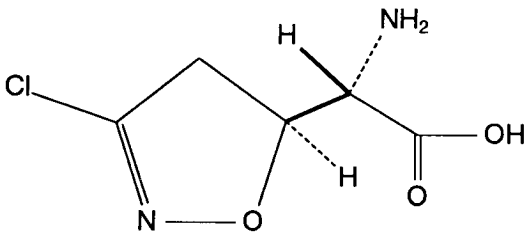
ACIVICIN

NSC - 163501



Chemical Name:
α-Amino-3-chloro-4,5-dihydro-5-isoxazoleacetic acid, [*S*-(*R**,*R**)]-

Other Names: AT-125; U-42126

CAS Registry #: 42228-92-2

Molecular Formula: $C_5H_7ClN_2O_3$ **M.W. :** 178.6

Approximate Solubility:	(mg/mL)
Water	17.9 - 18.2
0.1 M Citrate buffer pH 4.3	17.1 - 25.7
0.1 M Borate buffer pH 9.0	8.7 - 13.0
0.1 N HCl	31 - 35
0.1 N NaOH	34.4 - 36.8
95% Ethanol	0.8
10% Ethanol	8.2 - 16.4

Methanol	0.8
Chloroform	0.9

Stability:

Bulk:
A sample stored at 60 °C for 14 days showed no decomposition as indicated by UV absorption, paper chromatography, or ionic chloride determination.

Solution:
An aqueous solution (18 mg/mL) which was stored at 28 °C for 14 days showed less than 1% decomposition by UV absorption, paper chromatography and ionic chloride measurement.

Ultraviolet Absorption:

(H_2O)

λ_{max} = 218 ± 2 nm ε = 3,500 - 3,700

High Performance Liquid Chromatography:

Column:	μ-Bondapak C_{18} 300 x 3.9 mm i.d. (Waters Associates)
Mobile Phase:	Water containing 0.0075 M heptanesulfonic acid, pH 2.5
Flow Rate:	1.0 mL/min

Detection:	UV at 218 nm
Sample Preparation:	1.0 mg/mL in water or internal standard solution
Internal Standard:	Nicotinic acid (0.825 mg/mL in water)
Retention Volume:	5.4 mL (NSC-163501) 7.8 mL (I.S.)